

REMARKS/ARGUMENTS

Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Upon entry of this amendment, claims 17-50 will be pending.

An abstract of the application has been provided on a separate sheet in accordance with 37 C.F.R. 1.72(b).

Figures 3, 4 and 6 stand objected to as including multiple figures. Accordingly, amended figures have been supplied. With regard to reference numeral 16 as used on page 3, line 31, the Applicants thank the Examiner for bringing this typographical error to their attention and confirm that reference numeral 20 of figure 3b should in fact read 16.

The specification stands objected to for failing to describe an operable device that performs the intended interlocking method. Similarly, claims 1-16 stand rejected under 35 U.S.C. §112, first paragraph, as not enabled by the specification. The Applicants traverse this objection and rejection, in light of the above amendments and for at least the following reasons.

The paragraphs inserted at page 3 of the specification are supported throughout the specification and figures as filed. Accordingly, no new matter has been added.

The present application is for a device named “disconnecting circuit breaker” providing the equivalent safety function as a combination of one circuit breaker and one or two disconnecting switches for high tension switch gear. Traditionally, circuit breakers of this type were required to have separate disconnecting switches positioned adjacent to the circuit breaker to provide assured safety to technicians performing maintenance on such systems. The present invention eliminates the need for such disconnecting switches by providing a circuit breaker which can be electrically and mechanically interlocked in the open position, and provides visible indicators of this state to those who may need to ascertain the status of the breaker. Thus the present invention provides added safety while eliminating the need for a separate disconnecting switch.

The devices of the present invention provide an actuator that is mechanically linked to breaker contacts. The actuator, in turn, moves the breaker contacts from a “closed” to an “open” position, and thus connects or disconnects the circuit between the breaker connection terminals and the poles. The actuator can be locked in the open position by extending a

locking shackle into, *e.g.*, the release device of the actuator. Electrical interlocking of this rod is achieved by, in one embodiment, disconnecting the operating current to an electromagnet for movement of the locking shackle, thus preventing retraction of the rod. The specification also describes mechanical interlocking by other means such as with a blocking plate at the end of the operating rod in the linkage system.

Furthermore, the present invention provides for multiple indicators that indicate both electrical and mechanical interlocking as well as the position of the breaker contacts (open or closed). These indicators are described throughout the specification and figures, for example, a green lamp and/or mechanical arrow on the actuator unit is described at page 3, lines 28-32; the visual protrusion of the operating rod, as described on page 4, lines 8-14 and shown in figure 4; and a mechanical arrow on each pole, indicating the position of each set of breaker contacts, is described on page 3, lines 2-5. Accordingly, the skilled artisan would be able to construct the devices and perform the methods of interlocking as presently claimed by consulting the written description and figures provided in the present application.

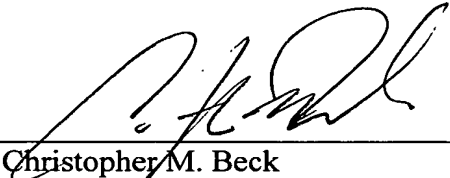
Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

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Date: February 5, 2004
Attachment: Abstract of the Disclosure, Drawing Figures

Fig. 1

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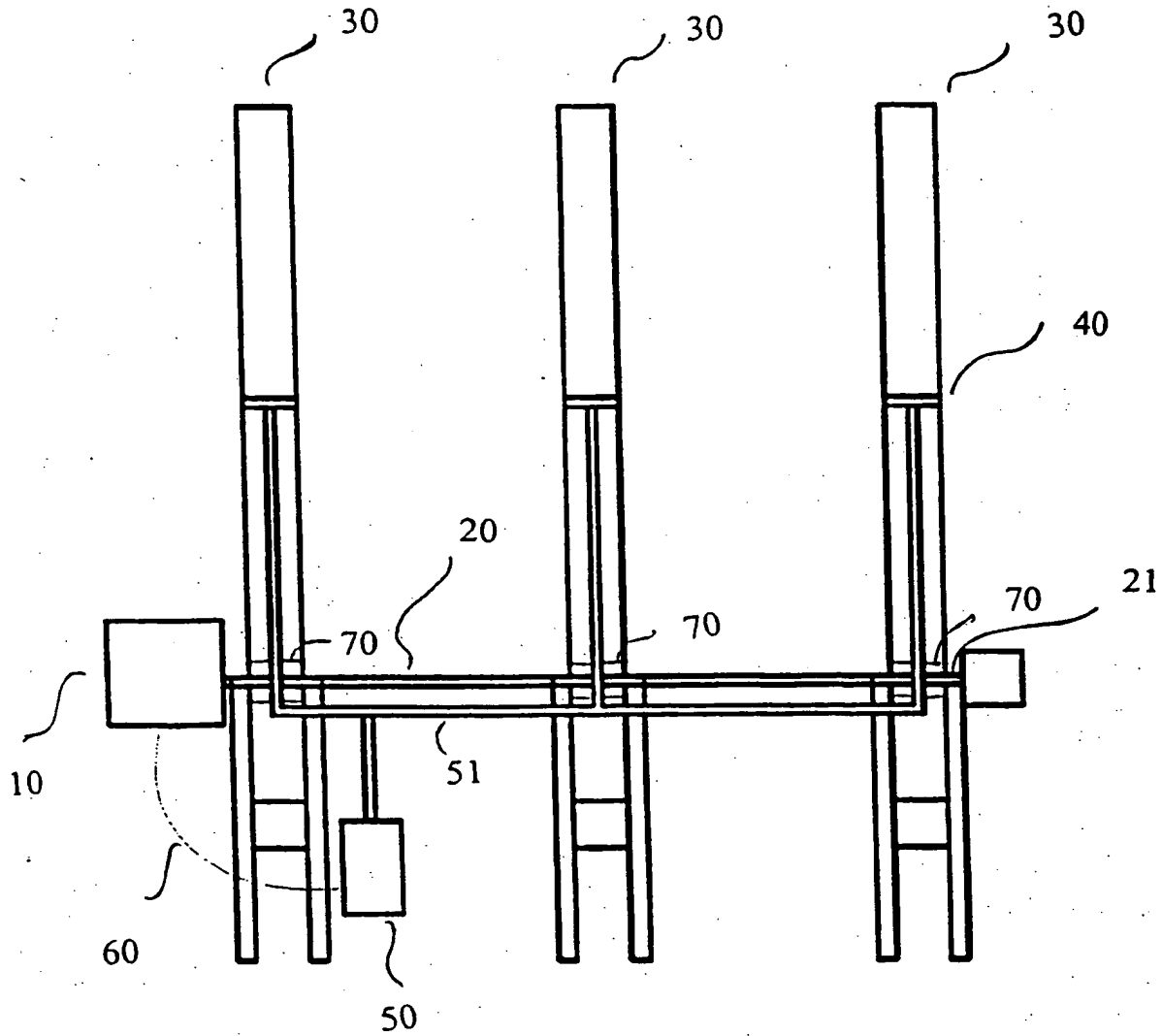
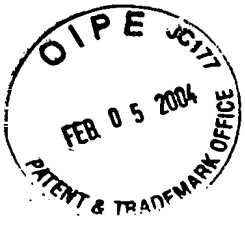


Fig. 1

Fig. 2

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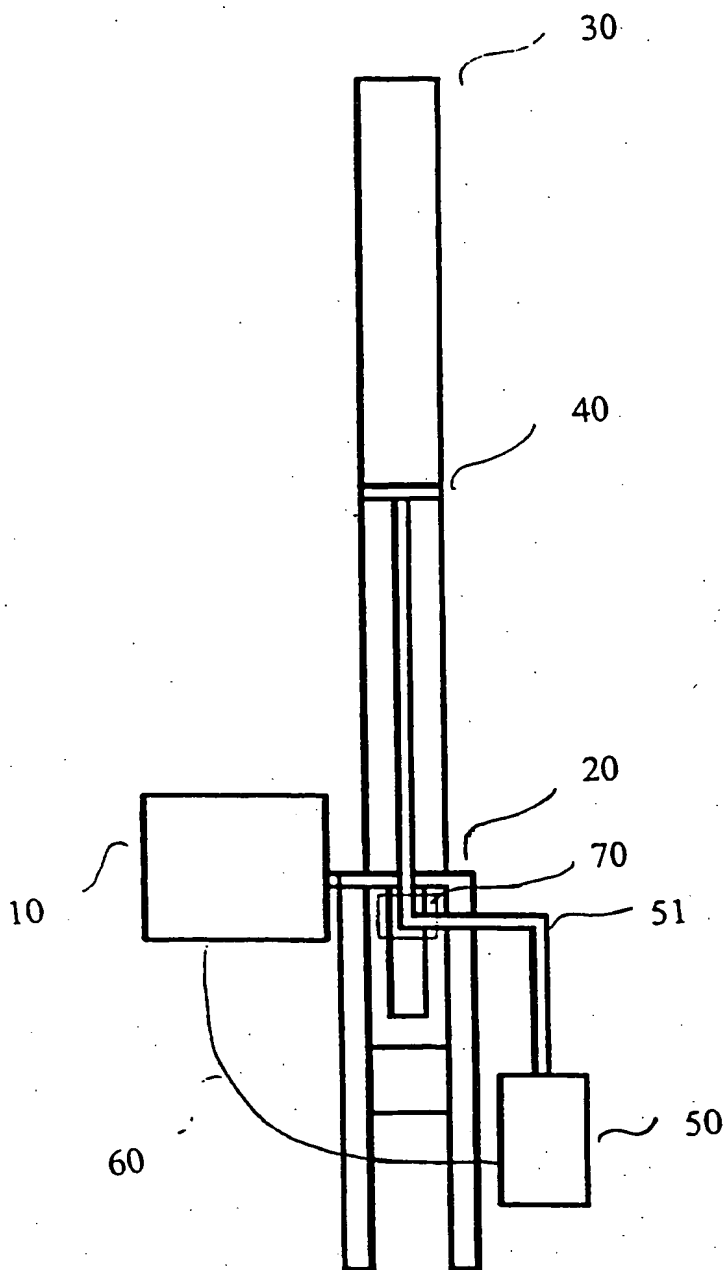


Fig. 2

Fig. 3

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FIG. 3A

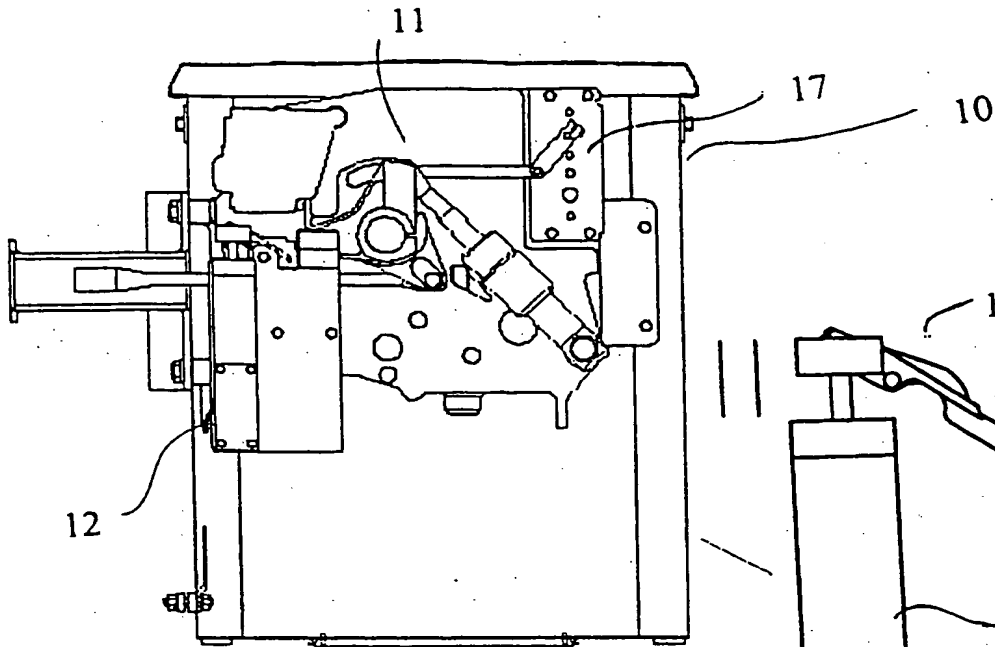


FIG. 3B

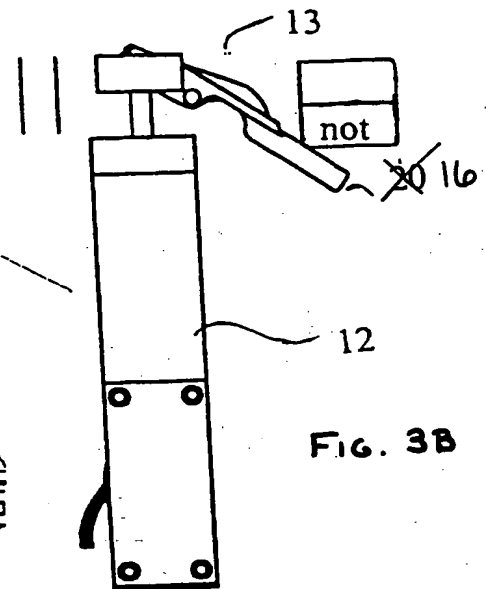
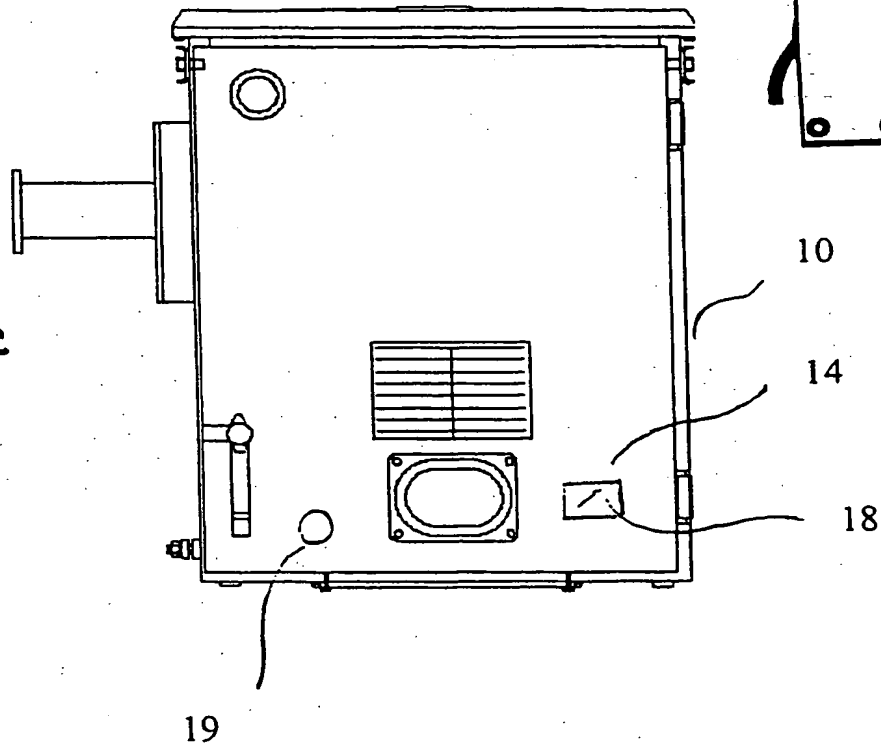


FIG. 3C



~~Fig. 3~~

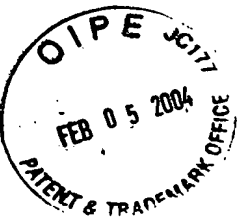


Fig. 4

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FIG. 4A

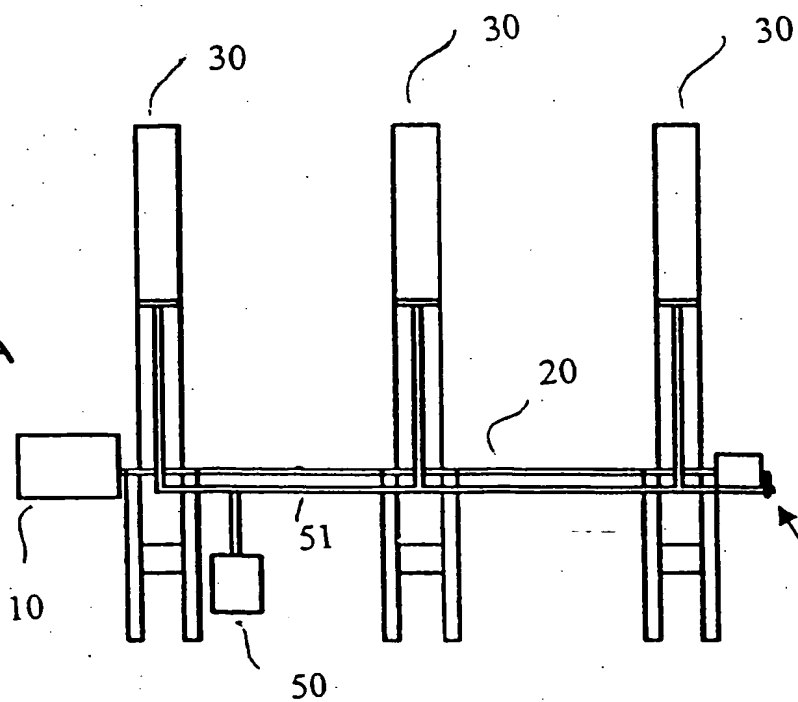
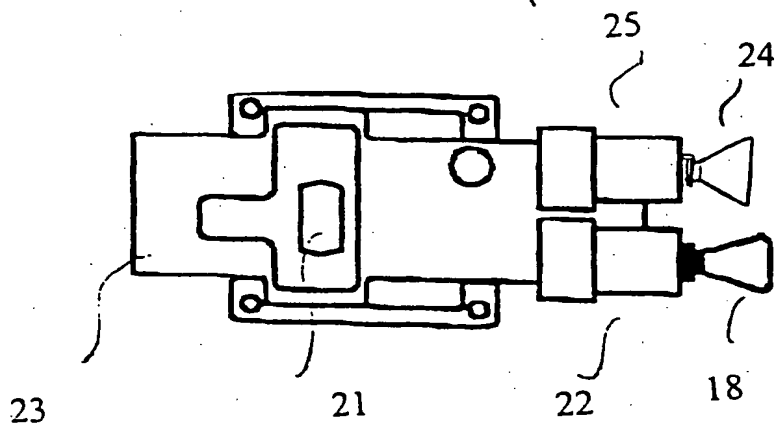


FIG. 4B



~~Fig. 4~~

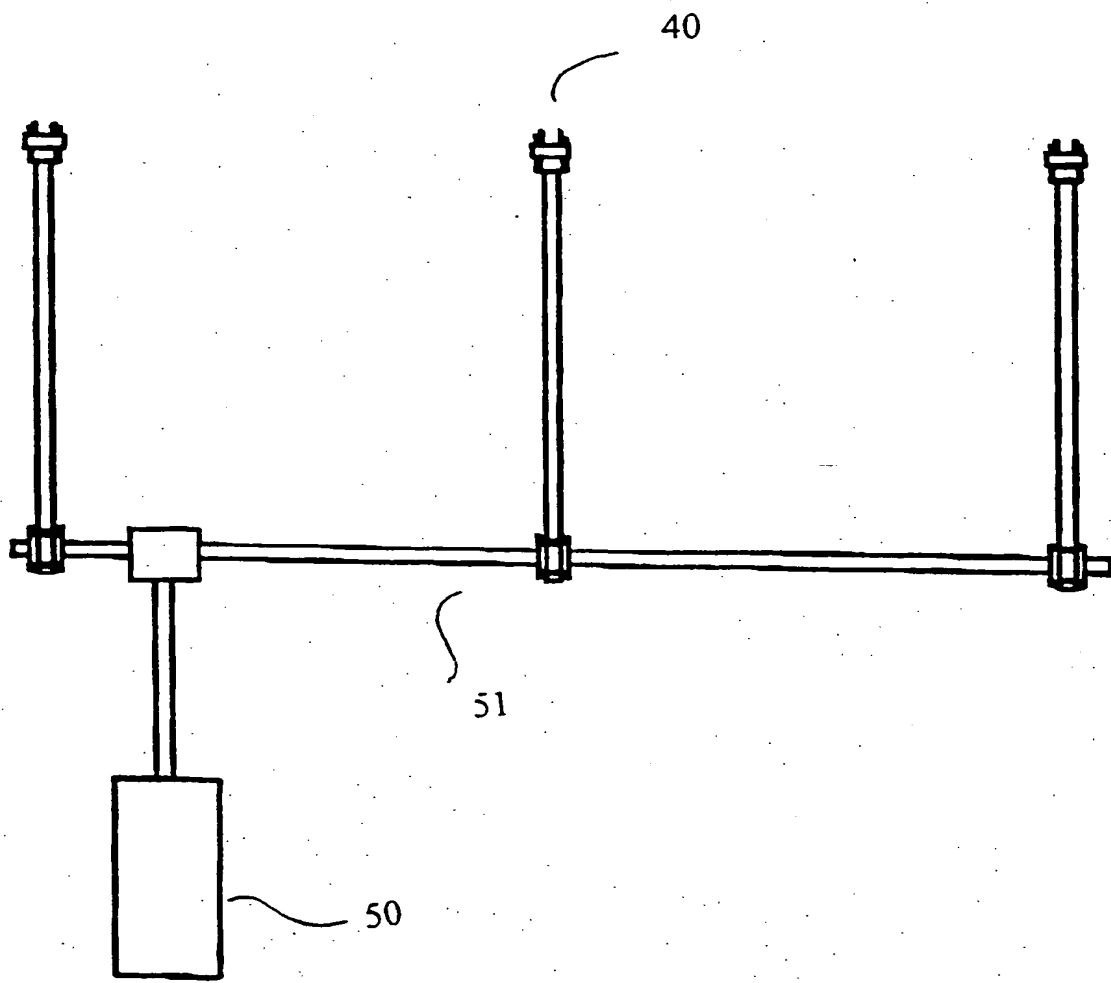


Fig. 5

Fig. 6

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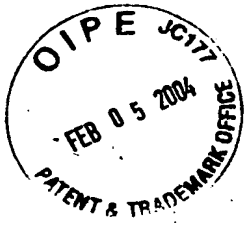


FIG. 6A

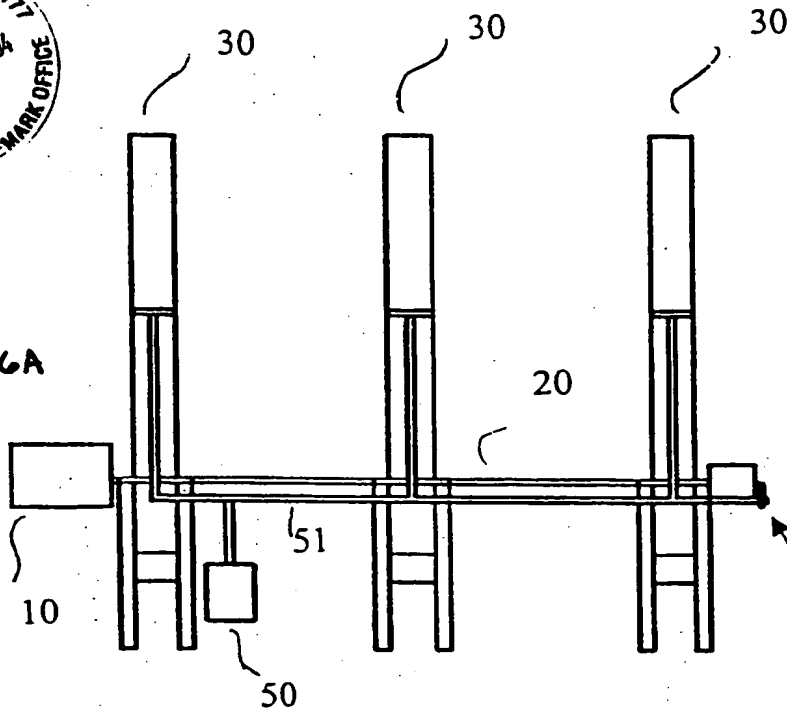


FIG. 6B

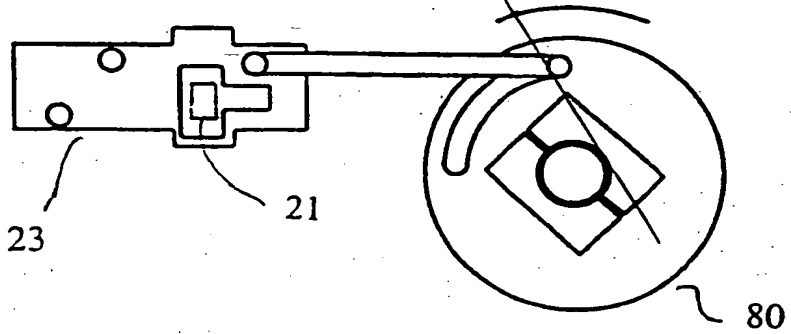


FIG. 6C

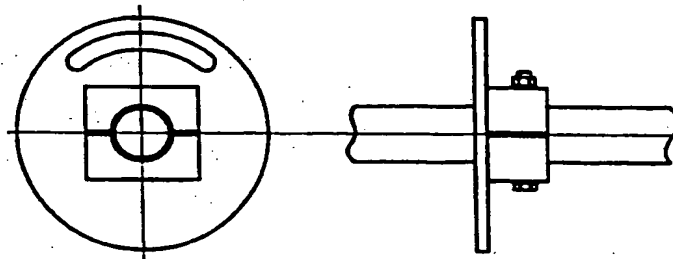


Fig. 6